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Affordable Design

The U.S. Department of Housing and Urban Development sponsors or cosponsors three annual competitions for innovation in affordable design: The Innovation in Affordable Housing Student Design and Planning Competition; the American Institute of Architects – HUD Secretary's Housing Community Design Awards; and the HUD Secretary's Opportunity & Empowerment Award, co-sponsored with the American Planning Association. This Cityscape department reports on the competitions and their winners. Each competition seeks to identify and develop new, forward-looking planning and design solutions for expanding or preserving affordable housing. Professional jurors determine the outcome of these competitions.

2019 American Institute of Architects (AIA)—HUD Secretary's Housing & Community Design Awards

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The Jury:

Simon Ha, AIA (Chair)
Principal, Steinberg Hart, Los Angeles, CA

Kai-Uwe Bergmann, FAIA
Partner, Bjarke Ingels Group (BIG)

Hans Butzer, AIA
Director, Butzer Architects and Urbanism

Mary Cerrone, AIA
Mary Cerrone Architects

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In this edition, we feature the winners of the 2019 American Institute of Architects—HUD Secretary's Housing & Community Design Awards. Recipients were recently honored at the annual meeting of the American Institute of Architects in Las Vegas, Nevada.

Introduction

For nearly two decades, the Office of the Secretary of Housing and Urban Development has collaborated with the American Institute of Architect's (AIA) Housing Knowledge Community to sponsor four prestigious housing design awards. During that time, the housing industry, in general, and the architectural community, in particular, faced challenges during a period of economic decline but has recently witnessed a resurgence of activity in response to the demand for affordable, quality housing. The four awards represent HUD and AIA's commitment to seeking feasible solutions to the affordable housing challenges that many low-income communities confront.

This is not just an awards competition that rewards excellent design. For each of the four award categories, applicants must also address how their submission responds effectively to the following AIA-HUD established goals: (1) implementing sustainable development practices; (2) ensuring that low- and moderate-income families have access to quality affordable housing; (3) promoting innovative design; (4) integrating social and cultural norms into the built environment; and (5) responding to client or resident needs. This Departmental piece will highlight the winners of this competition. The following four recipients demonstrate how affordable housing does not have to be limited to a certain building type or design format. Rather, innovation can occur through thoughtful design that is also reflective of the goals of a community, while at the same time providing a model for how other communities can expand affordable housing without sacrificing aesthetics or ingenuity.

Excellence in Affordable Housing Design Award

Winner: Williams Terrace, Charleston, South Carolina (David Baker Architects)

The *Excellence in Affordable Housing Design Award* recognizes projects that demonstrate how affordable housing design promotes equitable development and proves that good design is not exclusive to higher-income community projects. Williams Terrace is an adaptive reuse project that replaces an older development that sustained damage from Hurricane Hugo. This project was specifically planned as housing for low-income seniors. Although located in a high-velocity flood zone, the builders incorporated environmentally sustainable elements into the building itself and the surrounding natural environment that protects the conditions of the property and residents in the event of a disaster.

Sustainability. In light of the potential for the recurring natural disasters and extreme temperatures that often characterize Charleston, the judges thought that the effort to incorporate sustainability elements throughout the development was particularly noteworthy. All the newly built homes are oriented to the northwest to avoid heat loads from eastern and western exposure. The housing units incorporate glazing (a wall or window made of glass) at north and south to optimize daylight and enable solar control. At the east and west, glazing was minimized. The south-facing windows have box frames with calibrated overhangs and sides to shield from high-angle sunlight and are

shaded 100 percent of cooling hours. West-facing windows are shaded approximately 65 percent of cooling hours.

Both historic and contemporary building design common to Charleston's cultural traditions were interwoven into the development. For example, all the homes have high ceilings and are shaded by the deep piazzas and double overhangs on south-facing window boxes and cooled with cross-ventilation and ceiling fans. Outdoor circulation and inviting open-air stairs minimize elevator use and reduce the amount of conditioned space. Local and durable materials were used, which reduced shipping costs and minimized maintenance needs.

Recycled building materials are interwoven in the physical structure of the Williams Terrace homes.

Innovation. This is an interesting approach to addressing the needs of a senior community. Every amenity of the development incorporates some aspect of traditional design. One innovative feature, however, is the sliding shutters that cover all the windows. The sliding feature allows the resident some flexibility to either dim or open the shades to sunrays, but the feature itself also provides for multi-level circulation on the porches and through every floor. The 41 one-bedroom apartments are a version of the southern "shotgun" typology, with bedrooms toward the rear for privacy and social living areas connected to the shared porches, extending the living space outward and allowing for through-ventilation in every unit. The careful attention to the character of the community and the history of Charleston is to be lauded.

Affordability and Social Impact: Williams Terrace Senior Housing is the first dedicated housing for low-income seniors in the city of Charleston. The demand for senior housing is particularly high in the city, as Charleston is a popular retirement community. For even the residents who have lived in the city all their lives and picked up the pieces after the Hurricane Hugo disaster, however, aging in place is the ultimate goal. For these seniors, in particular, living in the city is their choice.

Creating Community Connection Award

Winner: Anchor Place, Long Beach, California (The Architects Collective)

The second award category, called the *Creating Community Connection Award*, acknowledges projects that use housing as a platform to transform a community, either through large-scale redevelopment or by creating an entirely new community with new housing options that connect housing to the larger community. In either case, winning submissions are recognized for demonstrating how important place-based planning is for communities affected by major challenges. Anchor Place was selected in this category for addressing the homelessness crisis in the Long Beach neighborhood. Essential features of the planned community are a recently renovated naval housing development used by homeless vets, a new community center, a much-needed upgrade to the existing greenspace, and improvements made to the street landscape to enhance connectivity. This holistic approach to community planning serves as a model for communities similarly situated.

Sustainability. Anchor Place design architects and partner owner, Century Villages at Cabrillo (CVC), became one of the first projects in Southern California to receive a Platinum certification from the USGBC LEED for Homes Multifamily Midrise rating system. The rating reflects the partners' commitment to creating communities that connect people to place, with supportive services located conveniently close or within the development. Addressing sustainability, there are four strategies that the team implemented to improve building performance throughout the development: (1) integrating building systems, (2) increasing the efficiency of the building envelope, (3) reducing energy loads through the use of on-site renewable energy systems, and (4) incorporating carbon-neutral fuel sources.

Anchor Place is a fairly large multifamily housing complex that has been recognized for its high energy performance.

The pursuit of high-performance, integrated building systems approaches included strategic solar orientation, window performance, window shading, natural lighting, ventilation, water

heating, and mechanical system efficiency. As a result of these efforts, Anchor Place was identified for having exceeded the 2008 California Energy Code (Title 24) by 15.8 percent. The building insulation, glazing U-value, and solar heat gain coefficient exceeded the 2013 Title 24 minimum standards. Energy loads were reduced for plugs, heating, cooling, lighting, and water heating. In addition, plug load was reduced through a vacancy sensor. High-efficiency HVAC units (SEER 15.5 or better) and filters (MERV 13) were used to improve indoor air quality. All buildings incorporate LED lighting, and the Energy Star lighting system includes a cut-off optic for lighting spillage reduction. The result is that the lighting control system reduces energy usage to 50 percent through the vacancy sensor. To reduce gas usage, in particular, a solar hot water pre-heating system was installed with a 44 percent solar fraction, thereby reducing the amount of gas needed.

Anchor Place boasts high-resolution, high-performing windows and low volatile organic compounds, or VOC, flooring.

Innovation. It is not surprising that the most innovative aspects of Anchor Place involve the additional sustainability features that not only aim to improve building performance but also to enhance healthy living. For example, building materials, such as linoleum tile with low-to-no VOCs, were installed throughout the building, while durable polished concrete flooring with no VOCs was used in the common areas. The use of these healthier materials ensures better indoor air quality. Nearly 90 percent of the construction waste was diverted from landfills, thus protecting residents from potential health hazards. Low flow plumbing fixtures were used throughout the building. The project provides a 64-percent reduction in estimated irrigation water demand.

The Anchor Place project demonstrates how balancing goals of affordability and environmental sustainability can be achieved.

Affordability and Social Impact. The owner's primary need was to deliver a multi-unit housing project that helps break the cycle of homelessness, works synergistically within the existing campus context and encourages residents to take part in the services and activities provided, thereby strengthening individual life outcomes and community cohesion. Arbor Place boasts 120 units of affordable housing, which includes 95 one-bedroom, 20 two-bedroom, and 5 three-bedroom units. All units are restricted between 30 percent and 60 percent AMI; those include one-bedroom units with rents ranging from $507 to $845; two-bedroom units ranging from $608 to $1,216; and three-bedroom units ranging between $703 and $1,406. In response to the need for more affordable housing units, about 45 percent of all the units are priced at 30 percent of the AMI.

In this Long Beach, California neighborhood, multimodal transportation options are a must for most residents in the development. For this community, aside from health and housing challenges, transportation has been a major barrier. To address this challenge, Anchor Place partners expanded bus routes that connect the residents to the central business district. The residents also noted that bus stops should be located within the development itself so that those with mobility concerns can also use the service. Moving about the development is made easier through the use of an open-air grand staircase that connects to a network of auxiliary staircases, enabling residents to travel from the ground level to any floor in the building. Disabled residents can use any number of connecting elevators, widened sidewalks, and ample open space for pedestrians to move about the development. With four wings, the building design creates three courtyard gathering spaces that connect to community-centered amenities located prominently on the ground floor. The landscape design, including circulation and courtyards, reinforces the strategy of prominently locating support services and amenities by leading residents directly to them.

Community-Informed Design Award

Winner: 8869 Avis, Detroit, Michigan (Detroit Collaborative Design Center)

The *Community-Informed Design Award* recognizes design that supports physical communities as they rebuild social structures and relationships that may have been weakened by outmigration, disinvestment, and the isolation of inner-city areas. Applicants for the award are asked to address how they address disinvestment in their communities by incorporating creative ideas from those in the community who are most marginalized or disadvantaged. This project—8869 Avis—was selected as one of the jury's favorite entries.

Sustainability: A centerpiece of the 8869 Avis project is the use of existing building materials, uniquely incorporated through the use of graffiti art. For this model, the porch is enclosed by geometric-patterned ornamental ironwork screens that reference the wide fencing structures prevalent in the neighborhood; they enhance open community while also protecting the residents. This feature was identified by the community of residents, some of whom contributed art to the structure or building materials laying around from vacant properties. Local metalworkers fabricated the screens. The mural that wraps throughout the building was designed by a late street artist and completed in tribute by an Inside Southwest Detroit program alumnus.

The objective of the Avis center is to provide a place where youth may illustrate cultural heritage through artistic expression.

The renovated project is beautified by new, colorful but high-performing insulated glass windows to maximize natural daylight and reduce the need to use artificial lights. LED lights were integrated throughout the building to increase efficiency in the main interior spaces and on the exterior. Bathroom and exterior lights were installed with sensors and timers to minimize overuse. Finally, an energy-efficient water heater rooftop unit cut utility usage by half in 2018.

Innovation: One of their flagship initiatives, "The Alley Project," transformed a neighborhood alley and surrounding vacant lots into an inspirational graffiti art gallery that connects neighbors and youth to each other as well as to community assets. The 8869 Avis development provides an anchor to The Alley Project through the renovation of an existing 2,400-square-foot building into a community center, the Inside Southwest Detroit headquarters, and a leasable tenant area. Rather than tear down the old building, the new 8869 Avis development not only rids the community of a former eyesore, the center aids in offering at-risk youth a variety of social activities, job training and education-based services, and programs to prevent homelessness or displacement. The art is not only provided by area artists—Avis extends opportunities to the area youth who contribute their artistic talents to the project.

Affordability and Social Impact: The project began with a participatory process that engaged representative stakeholders—graffiti artists, skateboarders, kids, grandparents, and other neighbors of all ages—in project planning and design decisionmaking, resulting in a community space that responds to local culture, needs, and opportunities. A series of community workshops, focus groups, and neighborhood celebrations gave people the agency and opportunity to guide the design of the building. The participatory process included activities that facilitated collaborative visioning and programming, informed site design including key contextual relationships linking to The Alley Project, and envisioned material and facade choices that support both security and transparency. This collaborative design process resulted in spaces and design elements that reflect the neighborhood's identity and vibrancy, embodied in a well-used community hub for creative programming and ongoing collaboration.

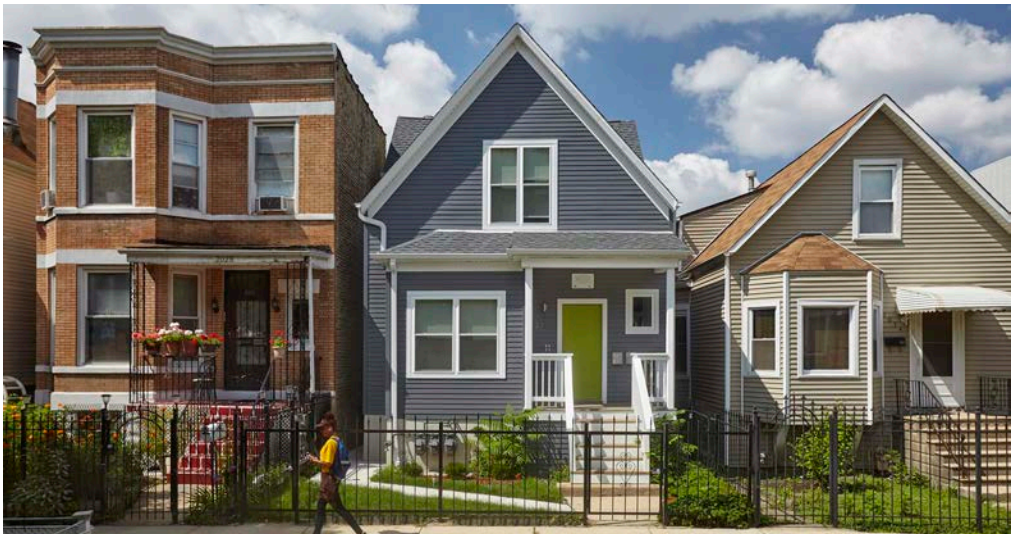
The Alley Project, ultimately, provides a safe haven for artists to express themselves and gives them additional occasions to engage with the community and potentially expand their artistic endeavors to other opportunities.

Housing Accessibility: The Alan J. Rothman Award

Winner: IFF Access Housing, Chicago, Illinois (Landon Bone Baker Architects)

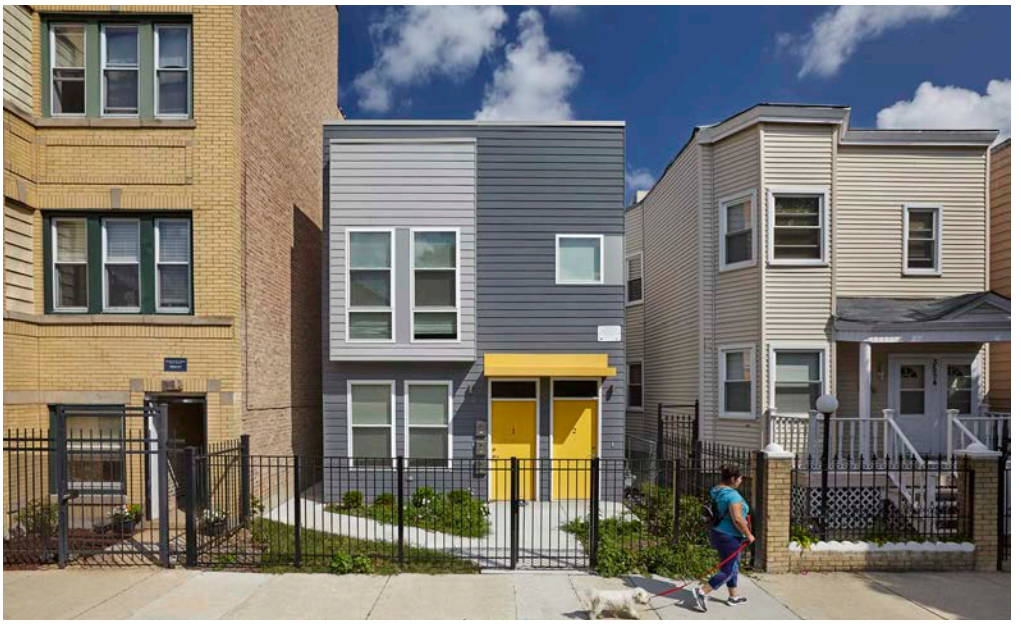
Named in remembrance of a HUD engineer who championed affordable housing for the disabled, the *Alan J. Rothman Award* is given to exemplary projects that demonstrate excellence in improving housing accessibility for people with disabilities. The IFF Access Housing project allows people with disabilities to live in environments that resemble conventional or traditional single-family neighborhoods. This is a different approach to the multifamily projects that we often see in the accessible housing space. The jury focused on the universal design features of the project, as well as visit able features that the disabled can use that are modern and contemporary.

Sustainability: The IFF Access Housing project was recognized, in part, for both rehab and new construction that meet Energy Star testing requirements and surpass minimum requirements for insulation and sealing for rehabs, resulting in low-cost energy bills for residents. Choosing to rehab existing buildings saves countless pounds of material from the landfill and reduces the amount of embodied energy required to manufacture and transport new materials to the site as a replacement. Salvageable materials were reused and incorporated throughout the project where possible during construction.



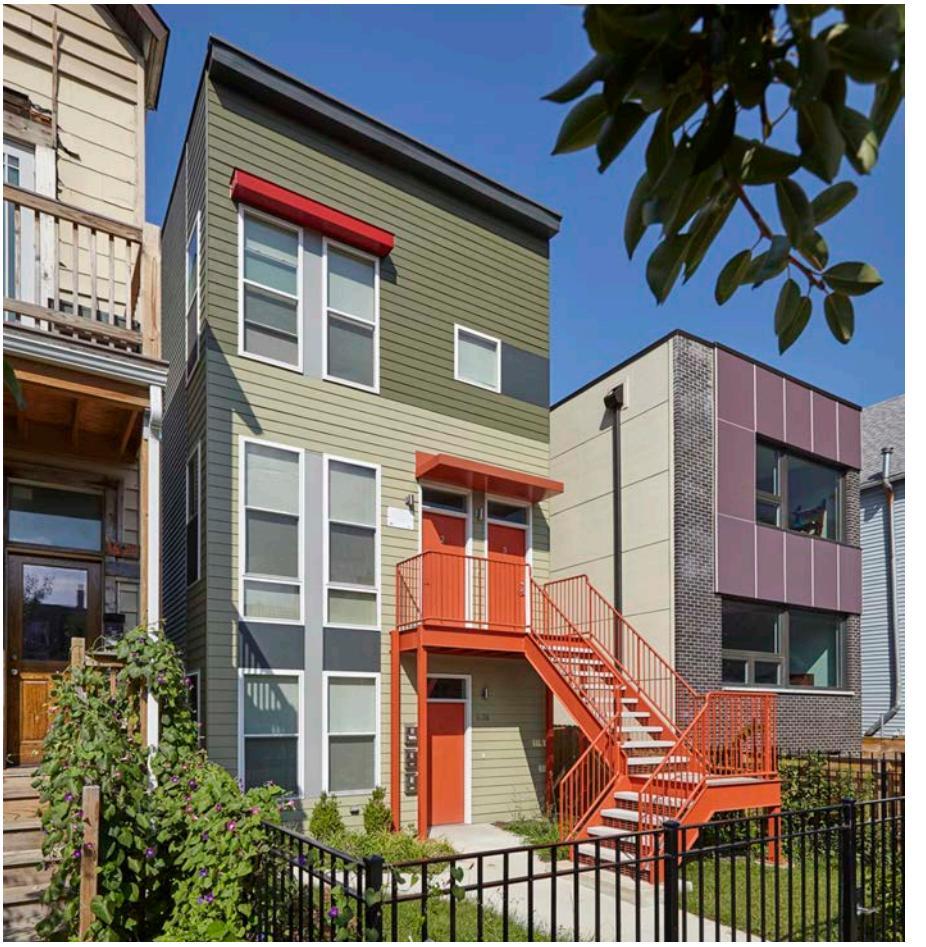
IFF Access Housing emphasizes the importance of accessible design features that do not resemble traditional housing for persons with disabilities.

Innovation: Recognizing that disabilities take many forms, each apartment features both universal and accessible design features. Ground-floor units are all fully accessible with zero-step thresholds and low peepholes; wheelchair-friendly kitchens with roll-under sinks and pull-downs in upper cabinets; front-loading washers and dryers in the units; and thoughtfully designed bathrooms with roll-in showers. Every unit in the project features design elements that serve all, including attractive contrast flooring borders for people with low vision; visual doorbells and strobe alarms for the deaf, and soothing color palettes for those with sensory difficulties.



The physical design of IFF Access Housing fits with the character of other houses in the neighborhood.

Affordability and Social Impact: The IFF Access Housing project's goal is to preserve affordable housing while creating accessible options for people with disabilities. In Illinois, a disproportionate number of low-income disabled persons live in institutions because they lack community-based accessible housing alternatives.



At IFF, the focus is on creating a community where persons living with various disabilities are not isolated from other residents in the community; rather, they live, work and enjoy social spaces as a community.

The IFF Access Housing project provides housing alternatives for individuals with disabilities to live independently. What sets this project apart is its human focus and scale. Rather than concentrating people with disabilities in a single site, Access Housing gives people the opportunity to thrive in charming and attractive homes that blend into communities of their choosing.

The AIA/HUD Secretary's Housing Community Design Awards program is one of several award programs that the Office of Policy Development and Research launched with national organizations where the mission aligns with Departmental policy priorities. This year's winning projects were screened through the Department's internal vetting process which consisted of the Departments of Community Planning & Development in Charleston, South Carolina; Long

Beach, California; Chicago, Illinois; and Detroit, Michigan; and the Office of Fair Housing and Equal Opportunity in San Francisco, California; the Office of Assessment Management and Portfolio Oversight in Washington, D.C.; and, the Inspector General's Office, Washington, D.C. as appropriate. No adverse findings were reported. The awards were announced on June 7, 2019, in a special ceremony and reception during the *A'19*, or the 2019 American Institute of Architects Conference in Las Vegas, Nevada.

Postscript

The competition is thoroughly documented online.

To learn more about the award:
https://www.huduser.gov/portal/about/housingCommDesign-2019.html

To read about the AIA/HUD award guidelines:
https://www.huduser.gov/portal/sites/default/files/pdf/AIASecretaryAwardsBrochure2020.pdf

To learn more detail about this year's winning submissions, as well as prior years' winners:
https://www.huduser.gov/portal/about/housingCommDesign-2019.html

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